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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/312,811	05/17/1999	MICHAEL A. GIARDELLO	PM-0261607	3077
27498 7590 02/01/2007 PILLSBURY WINTHROP SHAW PITTMAN LLP P.O. BOX 10500 MCLEAN, VA 22102			EXAMINER TESKIN, FRED M	
			ART UNIT	PAPER NUMBER
			1713	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/01/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

09/312,811

Applicant(s)

GIARDELLO ET AL.

Examiner

Fred M. Teskin

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 October 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-8,18,20,25,28-32 and 34-44 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 25, 28, 29, 34, 35, 37-39, 41-44 is/are allowed.  
6) ☒ Claim(s) 5,18,20,30-32 and 40 is/are rejected.  
7) ☒ Claim(s) 1,2,4-8 and 36 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 4, 2006, has been entered.

Claims 1, 2, 4-8 and 36 objected to because of the following informalities: in claim 1, line 3, "carbine" should read --carbene-- (*cf.*, e.g., claim 18, line 3). Appropriate correction is required.

Claims 5 and 30-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More specifically, the following grounds for indefiniteness apply to the indicated claims.

(A) Claim 5 appears incorrect as to dependency. Note that "the polysiloxane" lacks clear and proper antecedent basis from claim 1.

(B) Claim 30 depends from a cancelled claim (claim 26). In addition, the term "method" in each of claims 30-32 should read --process-- for consistency in terminology (*cf.*, claim 26, line 1).

Art Unit: 1713

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18, 20 and 40 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 02-289947 (all references thereto being to the corresponding English language translation furnished herewith).

The rejected claims are drawn to a golf club head [as such (claim 18), or as a species of molded article (claim 40)] consisting essentially of a polyolefin prepared by the metathesis of an olefin monomer using a ruthenium or osmium carbene catalyst; and one or more toughness and/or hardness modulators. Per claims 20 and 40, the polyolefin is poly-DCPD.

According to the present specification, the toughness and/or hardness modulators include rubber or elastomeric additives (page 4, ll. 26+).

JP '947 discloses a golf club head having an outer shell layer prepared by molding a liquid resin consisting of a metathesis polymerization catalyst and metathesis polymerizing monomer capable of creating a crosslinked metathesis polymer (p. 4, final full paragraph). Dicyclopentadiene (DCPD) or a monomer mixture having DCPD as its main substance is particularly preferred (p. 6, final sentence). The polymer may be prepared by reaction injection molding, in which procedure an elastomer is said to be effective in *strengthening* impact resistance (p. 10 bridging paragraph). Concrete examples of a golf club head prepared by reaction injection molding reactive solutions containing DCPD and EPDM and a specific metathesis catalyst and activator are presented (see, e.g., Operational Example 1 on pp. 16-18). EPDM is a species of elastomer (per p. 11, first full paragraph).

As such, JP '947 discloses a golf club head consisting essentially of poly-DCPD prepared by metathesis polymerization of the corresponding monomer, and species of applicants' modulators, but uses a different catalyst to make the polymer.

Art Unit: 1713

However, while the particular type of metathesis catalyst recited in claims 18 and 40 is not mentioned in JP '947, there is no evidence of record demonstrating that polyolefin prepared using such catalyst (i.e., Ru or Os carbene) differs substantially from poly-DCPD as prepared using the reference's metathesis catalyst. To the extent applicants rely on the recited catalyst to define properties of the claimed article, claims 18, 20 and 40 are indeed product-by-process claims, the patentability of which depends on the novelty and unobviousness of the article itself. *Cf., In re Thorpe*, 227 USPQ 964 (Fed. Cir. 1985).

Where, as here, a product-by-process claim is rejected over a prior art product that appears to be identical, although produced by a different process, the burden properly shifts to applicants to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 195 (Fed. Cir. 1983). This is especially true given the lesser burden of proof on the Office in making out a case of *prima facie* obviousness for product-by-process claims, because of their peculiar nature (M.P.E.P. 2113).

Claims 25, 28, 29, 34, 35, 37-39 and 41-44 are allowable over the prior art of record. Claims 1, 2, 4-8, 30-32 and 36 would be allowable if amended or rewritten to overcome the objection and rejection under 35 U.S.C. 112 set forth in this Office action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner F. M. Teskin whose telephone number is

Art Unit: 1713

(571) 272-1116. The examiner can normally be reached on Monday through Thursday from 7:00 AM - 4:30 PM, and can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on (571) 272-1114. The appropriate fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



FRED TESKIN  
PRIMARY EXAMINER  
1213

FMTeskin/12-17-06